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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,295	07/02/2001	Ryan Hoobler	4244 P	2248

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EXAMINER

LIU, SHUWANG

ART UNIT	PAPER NUMBER
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2634

DATE MAILED: 08/03/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/898,295

Applicant(s)

HOOBLER, RYAN

Examiner

Shuwang Liu

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4-7 and 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Amrany et al. (US 5,278,865).

As shown in figures 3 and 6, Amrany et al. discloses a system for synchronization of the digital transmission of analog modem signals, comprising:

(1) regarding claim 1:

(A) a base unit (for example, 306) in communication with an extension unit (for example, 307); wherein

(B) said base unit (figure 6) further comprises: .

(a) a base line interface circuit (102) in communication with a modem;

(b) a base analog to digital converter (203, 108 and 204) connected to said base line interface circuit (102);

(c) a base timing / framing circuit (113, 601, 603, 205 and 206) connected to said base analog to digital converter; and

(d) a base transceiver (207 and 110) connected to said base timing / framing circuit, wherein said base transceiver provides a signal to said extension unit (307).

(2) regarding claim 4:

wherein said base transceiver receives a signal from said extension unit (see figure 3).

(3) regarding claim 5:

further comprising a base formatting circuit (111) in connected to said base transceiver (see figure 6).

(4) regarding claim 6:

further comprising a base Digital to Analog converter (202) connected to said base formatting circuit.

(5) regarding claim 7:

(A) a base unit (306) in communication with an extension unit (307); wherein

(B) said extension unit (having same structure as figure 6, column 5, lines 39-67) further comprises:

(a) an extension line interface circuit (102) in communication with a user modem;

(b) an extension analog to digital converter connected (203, 108 and 204) to said extension line interface circuit;

(c) an extension timing / framing circuit (113, 601, 603, 205 and 206) connected to said extension analog to digital converter; and

(d) an extension transceiver (207 and 110) connected to said timing / framing circuit, wherein said extension transceiver provides a signal to said base unit (306).

(6) regarding claim 10:

wherein said extension transceiver receives a signal from said base unit (see

figure 3).

(7) regarding claim 11:

further comprising an extension formatting circuit (111) in connected to said extension transceiver.

(8) regarding claim 12:

further comprising an extension Digital to Analog converter (202) connected to said extension formatting circuit.

3. Claims 2 ,3, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amrany et al. in view of Tyroler (US 6,320,941).

Amrany et al. discloses all of the subject matter as applied to claim 1 above. However, Amrany et al. does not disclose that (1) the communication channel is an AC power line as recited in claims 2 and 8; and (2) the communication channel is a RF communication channel as recited in claims 3 and 9.

Tyroler teaches a communication system as shown in figure 1 with different interfaces (74) so as to provide a communication channel from any of the followings: analog telephone channel, digital telephone channel, cable channel, RF channel, AC power line channel and satellite channel (column 3, line 57-column 4, line 3 and column 7, lines 23-26).

(1) With respect to claims 2 and 8, one skilled in the art would have clearly recognized that AC power lines exist in almost all the buildings. It is desirable to use the existing AC power line in the buildings to provide data transmission in order to

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reduce the cost for wiring another new line as the communication channel. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the AC power line interface (74B in figure 1) of Tyroler in the communication system of Amrany et al. because such feature provides the communication channel at lower cost; and

(2) With respect to claims 3 and 9, it is desirable to use a wireless communication channel (RF) in the data communication in order to reduce cost and provide a flexibility in the communication. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use RF channel as taught by Tyroler in the communication system of Amrany et al. so as to reduce cost and provide a flexibility in the communication.

Allowable Subject Matter

4. Claims 13-15 are allowed.

5. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not teach or fairly suggest a method of synchronizing the digital transmission of analog modem signals, comprising: (A) generating a recreation clock signal from a received start bit of an asynchronous transmission; (B) detecting said received start bit; (C) receiving said start bit and a digital data signal serially from a transmission medium; (D) converting said received digital data signal to an analog format-, and (E) transmitting a second digital data signal via a return path.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shuwang Liu whose telephone number is (703) 308-9556.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin, can be reached at (703) 305-4714.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9306 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



Shuwang Liu
Primary Examiner
Art Unit 2634

July 23, 2004